

XXII. NOTES ON PEDIPALPI IN THE  
COLLECTION OF THE INDIAN MUSEUM.

V.—TARTARIDES COLLECTED BY MR. B. H. BUXTON IN CEYLON  
AND THE MALAY PENINSULA.

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A valuable collection of Pedipalpi has recently been presented to the Indian Museum by Mr. B. H. Buxton, who obtained them in Ceylon and the Malay Peninsula when collecting further material for his work on Arachnid morphology. The Thelyphonidae and Tarantulidae will be dealt with in papers dealing with the Indo-Australian members of these groups as a whole. The time does not, however, appear to be ripe for the preparation of a general account of the Tartarides, of which group Mr. Buxton's specimens form the subject of this paper.

The chief points of interest brought out by Mr. Buxton's collection of Tartarides are (1) the unsatisfactory nature of the distinction between *Schizomus* and *Trithyreus*<sup>1</sup>, a distinction involving the separation into different subgenera of such obviously allied species as *crassicaudatus* and *perplexus*; and (2) the increasing number of Oriental species whose females closely resemble the Papuan *modestus*, Hansen. It seems to me undesirable to go on describing these species in the absence of males on the basis of measurements alone.

***Schizomus (Trithyreus) perplexus*, n. sp.**

*Locality*.—Polonuruwa, North-Central Province, Ceylon (under bricks 4 ♂♂, 1 ♀; under leaves 1 ♀ and several young).

♂. *Cephalothorax*.—Eye-spots absent. Cephalic sternum about as long as broad.

*Arms*.—Nearly as long as the body. Trochanter slender as in *S. (s. str.) crassicaudatus*<sup>2</sup>; lower margin lightly sinuous, convex basally, convex distally; anterior angle long and spiniform, directed slightly upwards, with a similar but somewhat smaller, lightly upturned process arising on the inner side at its base; anterior margin strongly convex. Femur with a ventral tubercle at the base as in *S. crassicaudatus*, but prolonged beyond this, the total length of the ventral margin in front of the trochanter being more

<sup>1</sup> See Hansen and Sørensen, *Arkiv för Zoologi* II (8), 1905, pp. 33-34.

<sup>2</sup> See Hansen and Sørensen, *Arkiv för Zoologi* II (8), 1905, pp. 40-42, pl. iii, figs. 1a-1i.

than half as great as the depth of the femur at its distal end. Patella also somewhat slenderer than in *S. crassicaudatus*, the median ventral tooth shorter and not directed forwards, the margin strongly concave behind it, more lightly concave in front. Tibia concave ventrally at base, then abruptly swollen and gradually tapered; the basal concavity hidden when the arm is not extended. Upper margin of tarsus two and a half times as long as claw.

*First legs.*—Nearly half as long again as body. Coxa terminating behind base of trochanter of arm. Femur about three quarters of length of patella, slightly longer than tibia. Tibia about one-fifth as long again as foot. Foot about ten times as long as deep, deepest at end of metatarsus. Second metatarsus about three-fifths as long as whole tarsus and about equal to five

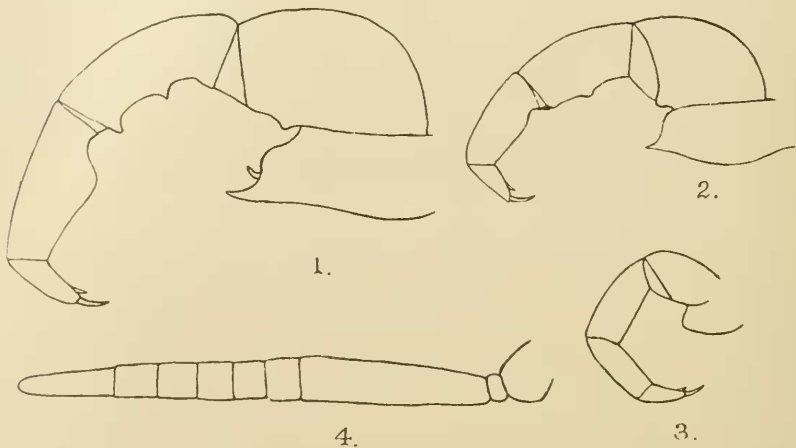


FIG. 1.—*Schizomus (Trithyreus) perplexus* ♂ left arm, × 30.  
 " 2.— " " " ♀ " " × 30.  
 " 3.— " " " *buxtoni* ♂ " " × 30.  
 " 4.— " " " " ♂ foot of antenniform leg, × 65.

proximal tarsal joints which are subequal in length, the basal being perhaps somewhat shorter than the others.

*Fourth legs.*—Femur slenderer than in *S. crassicaudatus*, about two and a third times as long as deep.

*Tail.*—Resembles that of *S. crassicaudatus*.

♀. *Cephalothorax.*—As in the male.

*Arms.*—About three-quarters the length of the body. Trochanter with both margins lightly and evenly convex, practically straight; anterior angle less strongly produced than in male, a small spine present on inner surface some distance from it. Femur shorter than in male, free ventral margin not longer than basal tubercle. Lower margin of patella biconcave; ventral spine represented only by a tubercle between these concavities. Ventral margin of tibia concave basally, then lightly swollen. Upper margin of tarsus twice as long as claw.

*First legs.*—Nearly a quarter as long again as body. Coxa terminating behind base of trochanter of arm. Femur about three quarters length of patella, about as long as tibia. Tibia about a quarter as long again as foot. Foot about ten times as long as deep, deepest at end of metatarsus. Second metatarsus scarcely as long as sum of five proximal tarsal joints, about half as long again as terminal tarsal joint. First tarsal joint slightly shorter than any of the succeeding four.

*Fourth legs.*—Like those of male.

*Tail.*—Long and slender, about six times as long as deep. Basal joint nearly twice, second scarcely more than once as long as deep. Separation of third and fourth joints obscure.

*Colour of both sexes.*—Pale reddish brown, the abdomen and legs faintly greenish.

*Length.*—♂ about 3.5, ♀ about 3.0 mm. The arms of the male show this species to be closely related to *Schizomus* (*s. str.*) *crassicaudatus* from Ceylon; but its thoracic terga have the structure characteristic of the subgenus *Trithyreus*.

The distinctive features of the arms are fully developed in large specimens only. They are scarcely distinguishable in small ones, which are often most difficult to distinguish from immature specimens of the next species.

### ***Schizomus* (*Trithyreus*) *buxtoni*, n. sp.**

*Localities.*—Polonuruwa, North-Central Province, Ceylon (several ♂♂, ♀♀; under bricks, many under leaves); Minneriya, North-Central Province (3 ♂♂); Sigiri, Central Province (many ♂♂, ♀♀).

♂. *Cephalothorax.*—Eye-spots absent. Cephalic sternum slightly longer than wide.

*Arms.*—Slender and of moderate length, without distinctive tubercles or spines. Trochanter with lower margin distinctly convex, anterior angle obtuse and more or less rounded with a small spine on the inner side behind it, anterior margin practically straight. Femur slender, with free ventral margin about equal to anterior margin of trochanter. Claw about half as long as upper margin of tarsus.

*First legs.*—Very slender, about one and a half times as long as body. Coxa terminating behind base of trochanter of arm. Femur much shorter than patella (7 : 9), slightly longer than tibia, much longer than foot (7 : 5). Second metatarsus about as long as five succeeding tarsal joints, which increase regularly in length from basal to distal.

*Fourth legs.*—Femora fully two and a half times as long as deep.

*Tail.*—Somewhat like that of *S. suboculatus*, but the disc broader and more evenly rounded behind, with the sides more convex distally—sometimes almost circular or even squarish. When seen from the side it lacks the profound dorsal excavation seen in Hansen and Sørensen's figure of that species.

♀. Closely resembles the male in general features, but the first legs are only about twice as long as the body. The tail is slender, being about five times as long as deep. The first joint is longer than the second, which is scarcely as long as broad. The first and second joints combined are scarcely as long as the third and fourth which are indistinctly separated.

*Colour of both sexes.*—Pale brown, sometimes with a greenish tinge in large specimens.

*Length.*—Up to about 3 mm.

This species seems to be allied to *S. vittatus*<sup>1</sup>, but is paler and usually browner in colour, and lacks the eye-spots so conspicuous in that species. The tail of the female (the only sex known in *S. vittatus*) is, moreover, much slenderer, and lacks the swelling characteristic of that species.

#### **Schizomus (Trithyreus) spp. aff. modestus, Hansen.**

*Localities.*—Malay Peninsula (outside Kubang Tiga and Jerneh caves, Perlis; Grik and Lengong, Perak).

The specimens, although fairly numerous, are all female or immature. The terminal joint of the tarsus of the antenniform legs is somewhat more than half as long as the metatarsus, as in *S. modestus*,<sup>2</sup> which the specimens appear to resemble in a general way, as do also the females of *S. vittatus*,<sup>1</sup> *greeni*,<sup>3</sup> *buxtoni*, etc. In the absence of any really definite characteristics, such as would doubtless be found in the tail of the male, it seems undesirable either definitely to record the Papuan species from the Malay Peninsula, or to provide the specimens before me with a new specific name. It is possible that more than one species may be represented.

<sup>1</sup> *Schizomus (Trithyreus) vittatus*, Gravely, *Spolia Zeylanica* VII, 1911, pp. 138-139, text-fig. 2c.

<sup>2</sup> *Trithyreus modestus*, Hansen and Sørensen, *Arkiv för Zoologi* II (8), 1905, pp. 63-65, pl. vi, figs. 3a-3f.

<sup>3</sup> *Schizomus (Trithyreus) greeni*, Gravely, *Rec. Ind. Mus.* VII, 1912, p. 109, text-fig. B.